

# PATENT ABSTRACTS OF JAPAN

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(71)Applicant : JAPAN TRANSPORTATION  
ENGINEERING CORP

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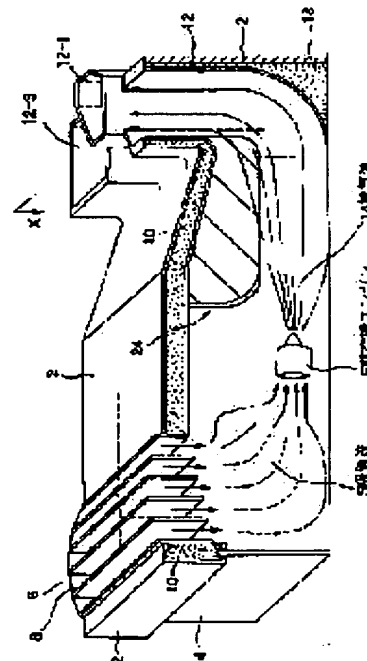
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## (54) GROUND TEST FACILITY FOR AIRCRAFT ENGINE

### (57)Abstract:

**PROBLEM TO BE SOLVED:** To eliminate installation of an exhaust duct of a low-frequency noise generating source to provide a noise-suppressed type facility for an engine ground test of simple structure excellent in noise-suppressing effect, in the noise-suppressed type facility for conducting the engine ground test in the condition where an aircraft is parked on the ground.

**SOLUTION:** This facility is a noise-suppressed type facility for an engine ground test while parking an aircraft on the ground. The facility has a deck plate 12 disposed to be positioned with a space on the rear side of an exhaust port of an aircraft engine E set for the ground test, arranged inclinedly from its lower side upto its upper side to form an exhaust passage for guiding exhaust of the engine E to the upper side, and provided with plural holes, a sound insulation wall 2 arranged in a backface side of the deck plate 12 to keep a space with respect to the plate 12, and a sound insulation layer executed with an anisotropic material such as a porous material and a crushed stone in a floor between the deck plate 12 and the sound insulation wall 2.



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**CLAIMS**

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[Claim(s)]

[Claim 1] In the aircraft-engine ground test facility for performing an engine ground trial, with the aircraft parked at an apron at an apron The deck plate with which it inclined upwards, and has been arranged from the lower part, and two or more holes were prepared so that the exhaust air way to which it is installed so that spacing may be maintained behind the exhaust port of the aircraft engine which performs said ground trial and it may be located in it from the exhaust port of this engine, and engine exhaust air is led up might be formed, The aircraft-engine ground test facility characterized by having the silence layer constructed to the floor line between the noise-proof wall which maintained this deck plate and spacing and has been arranged at the tooth-back side of this deck plate, and said deck plate and noise-proof wall.

[Claim 2] The aircraft-engine ground test facility according to claim 1 characterized by constituting said silence layer from different rectangle ingredients, such as porous material or a crushed stone.

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**DETAILED DESCRIPTION**

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[Detailed Description of the Invention]

[0001]

[Field of the Invention] This invention relates to the aircraft-engine ground test facility of the silence mold for performing an engine ground trial, with the aircraft parked at an apron at an apron.

[0002]

[Description of the Prior Art] In order to perform an engine ground trial, parking the aircraft after check and maintenance at an apron at an airport etc., the test facility of a silence mold is prepared. As an aircraft-engine ground test facility for this, the thing of various structures is offered conventionally. There is a thing of a configuration of having only installed the noise barrier in the tooth-back side of the aircraft which performs an engine ground trial as the example as shown in drawing 6 .

[0003] This is called a blast-fence mold and forms the noise barrier 01 which interrupts the noise which comes out of an aircraft engine to the tooth-back side of an engine ground testing machine. In the aircraft-engine ground test facility of this form, in order to interrupt the high temperature and the high-speed style of an exhaust jet from an aircraft engine, the blast fences 02, such as a product made from a wire gauze, must be installed ahead of a noise barrier 01. Since noise reduction is carried out according to the diffraction operation in the plane noise barrier 01 in a facility of this blast-fence mold, there are few those noise reductions.

[0004] Moreover, there is an aircraft-engine ground test facility called the splitter mold shown in drawing 7 . This is the thing of the structure which leads the exhaust air from the aircraft engine which performs an engine ground trial to the splitter mold silencer 011, and muffles it with a jet pipe 010. The splitter mold silencer 011 has the passage divided in the shape of a honeycomb with the acoustical panel.

[0005] In this splitter type of aircraft-engine ground test facility, the jet pipe 010 for introducing exhaust air of an aircraft engine is required for a splitter mold silencer, and this jet pipe 010 will generate the noise of a specific frequency in a duct, if exhaust air flows inside. for this reason, the splitter mold silencer for muffling the noise which a jet pipe 010 generates -- it is necessary to \*\*\*\* -- a facility of this splitter mold -- structure -- it cannot but become a complicated heavy lift.

[0006] Moreover, there are some which are called a semi hanger mold as other conventional aircraft-engine ground test facilities using a splitter mold silencer. Although this is surrounded with the noise-proof wall in the surroundings of the aircraft which performs an engine ground trial, it has the same fault as the facility shown in drawing 7 in that it has the trouble accompanying installing a splitter mold silencer.

[0007] Furthermore, there are some which are called the hashed house (all sealing) mold shown in drawing 8 again as other aircraft-engine ground test facilities using a splitter mold silencer. This is what made the aircraft which performs an engine ground trial wrap building form by the perimeter, and the inlet 022 for passing inhalation of air in an engine is established in the front face of the aircraft. In drawing 8 , 021 is a splitter mold silencer and it is the jet pipe with which 020 leads engine exhaust air to the splitter mold silencer 021. Although this facility is excellent in insulation, since it furnishes a splitter mold silencer, it has the same trouble with having explained the facility of drawing 7 .

[0008]

[Problem(s) to be Solved by the Invention] without it uses the splitter mold silencer which needs installation of the jet pipe with which the conventional silence mold facility for performing an engine ground trial while this invention had parked the aircraft at an apron serves as a generation source of a low frequency noise in view of having said fault carried out -- structure -- it is easy and it is making into the technical problem to offer a silence mold facility of the engine ground trial which was excellent in the silencing effect.

[0009]

[Means for Solving the Problem] In order that this invention may solve said technical problem in the silence mold facility for performing an engine ground trial, with the aircraft parked at an apron at an apron, The deck plate with which it inclined upwards, and has been arranged from the lower part, and two or more holes were prepared so that the exhaust air way to which it is installed so that spacing may be maintained behind the exhaust port of the aircraft engine which performs a ground trial and it may be located in it from the exhaust port of this engine, and engine exhaust air is led up might be formed, The aircraft-engine ground test facility of structure which has the silence layer constructed to the floor line between the noise-proof wall which maintained this deck plate and spacing and has been arranged at the tooth-back side of this deck plate, and said deck plate and noise-proof wall is offered.

[0010] Said silence layer in the aircraft-engine ground test facility by this invention can consist of different rectangle ingredients, such as porous material or a crushed stone.

[0011] In the aircraft-engine ground test facility of this invention with the above structure, a big silencing effect can be obtained according to a diffraction operation of the deck plate to which the exhaust air which comes out of an aircraft engine is led up. Moreover, since two or more holes are prepared in that deck plate, while exhaust air of an aircraft engine controls the rise of the contact jet pressure produced by contacting this deck plate directly, the noise of an exhaust jet is absorbed sound.

[0012] Moreover, since the silence layer is constructed to the floor line between that the noise-proof wall is formed in the tooth-back side of a deck plate and a deck plate, and a noise-proof wall, the jet noise of engine exhaust air is absorbed. Moreover, the wave-motion flow by the contact back pressure of the exhaust jet which acts from the hole of a deck plate to the air space between a deck plate and a noise-proof wall on the back is eased by existence of this silence layer.

[0013] Thus, the jet noise of an aircraft engine can be decreased in the aircraft-engine ground test facility of this invention, without using a splitter mold silencer and the jet pipe for opening this and the exhaust port of an aircraft engine for free passage.

[0014]

[Embodiment of the Invention] Hereafter, based on one gestalt of operation illustrating the aircraft-engine ground test facility by this invention, it explains concretely. In drawing 1 and drawing 2, 2 is a sound-proof wall, it is prepared so that the surroundings of the aircraft which performs an engine ground trial may be surrounded, and opening which can be opened and closed by the soundproof door 4 is formed in the nose side. A sound-proof wall 2 is formed also in head lining, and is constituted by all closed mold.

[0015] The inhalation-of-air opening 6 for supplying the inhalation-of-air style 5 to aircraft-engine E which performs a ground trial is formed in the nose side of the sound-proof wall 2 of head lining, and the inhalation-of-air silencer which set up and constituted two or more acoustic tiles 8 is formed in the inhalation-of-air opening 6. In addition, the sound-proof wall 2 has composition which an air space 10 is formed in the interior and heightens a silencing effect so that it may see in drawing.

[0016] The deck plate 12 is formed ahead of the sound-proof wall 2 used as the back of the exhaust port of Engine E of performing a ground trial. Although aircraft-engine E has the pin center, large engine prepared in the core of a fuselage, and the wing engine attached in the aerofoil, it is prepared in three places, 12-1, 12-2, and 12-3, so that a deck plate 12 may be expected to be able to respond to the exhaust stream 14 of both the engine by drawing 2.

[0017] As the thing for pin center, large engines is notionally shown in drawing 4, from the lower part, in accordance with the sound-proof wall 2, a deck plate 12 is started gradually and prepared upwards so that the exhaust air way (gas duct) 16 to which exhaust air of aircraft-engine E blowing off is led up may be formed. A deck plate 12 is built with the metal which is equal to contact in the high temperature and the high-speed fluid of an engine exhaust jet, and is prepared in the location which maintains predetermined spacing from an engine exhaust port. the hole with which two or more holes of magnitude with a proper deck plate 12 were prepared -- it has structure of a difference.

[0018] The sky gaseous layer 18 is formed between the deck plate 12 and the sound-proof wall 2 which is back [ the ], and the silence layer 20 constituted from different rectangle ingredients, such as porous material or a crushed stone, is constructed in the floor line of the sky gaseous layer 18. Although 22 is the exhaust air wall which rose from head lining as the field inside the exhaust air way 16 is formed, this may exclude installation rather than is indispensable.

[0019] The actual configuration of the exhaust air way (gas duct) 16 formed with a deck plate 12, head lining, and the exhaust air wall 22 serves as a mode shown in drawing 3. In addition, the gas duct side which forms a sound-proof wall 2 and the exhaust air way 16 is made into the absorption-of-sound type sound insulating construction made from concrete constituted so that it might be made to absorb sound by

porosity material. 24 is an exhaust-gas-recirculation prevention plate which prevents the engine exhaust air which was formed in head lining and turned to the exhaust air way 16 recycling in the direction of engine inhalation of air.

[0020] The exhaust jet which the aircraft-engine ground test facility of this operation gestalt has the above structure, and was discharged by the ground trial from the exhaust port of an aircraft engine is led to the upper exhaust air way 16 in a deck plate 12, and a silencing effect is obtained according to the flume detour chip box operation which turns the direction of this noise up. Moreover, while the rise of contact jet pressure is controlled even if an engine exhaust jet contacts a deck plate 12 directly since two or more holes are prepared in the deck plate 12, reflection of a jet is controlled, the flow of an exhaust jet is softened, and the low frequency sound by the jet speed difference does not occur. Moreover, two or more of these holes demonstrate an absorption-of-sound operation.

[0021] The wave-motion flow by the contact back pressure of the engine exhaust jet which passes the hole of a deck plate 12 and acts on the sky gaseous layer 18 by the side of the tooth back of a deck plate 12 on the other hand is eased by the silence layer prepared in the floor line of the sky gaseous layer 18, and the acoustic wave which passes and spreads a deck plate 12 is absorbed. Furthermore, the sky gaseous layer 18 and sound-proof wall 2 in the tooth-back side of a deck plate 12 decrease the engine exhaust jet noise effectively.

[0022] As mentioned above, although concretely explained based on the operation gestalt illustrating this invention, it cannot be overemphasized that various modification may be added to the concrete structure and a configuration within the limits of this invention which this invention is not limited to these operation gestalten, but is shown in a claim.

[0023] For example, although head lining is also covered with a sound-proof wall 2 and being considered as the configuration of all closed mold with the above-mentioned operation gestalt, it is good for head lining also as structure where a sound-proof wall is not established depending on a site condition. Moreover, although the configuration which formed the inhalation-of-air opening 6 in the head-lining section is adopted in the thing of the above-mentioned operation gestalt, you may make it incorporate inhalation of air from the front, and it is not limited to preparing inhalation-of-air opening in the head-lining section at all.

[0024]

[Effect of the Invention] As explained above, the aircraft-engine ground test facility by this invention The deck plate with which it inclined upwards, and has been arranged from the lower part, and two or more holes were prepared so that the exhaust air way to which it is installed so that the exhaust port and spacing may be maintained behind [ of performing a ground trial ] an engine exhaust port and it may be located in it, and engine exhaust air is led up might be formed, It has the silence layer constructed to the floor line between the noise-proof wall which maintained this deck plate and spacing and has been arranged at the tooth-back side of this deck plate, and said deck plate and noise-proof wall.

[0025] Therefore, in addition to the silence function by such arrangement configuration that forms the exhaust air way to which the exhaust air which comes out of an aircraft engine is led up, in the aircraft-engine ground test facility of this invention, a big silencing effect can be obtained by the diffusion function of the noise by discharging up. Moreover, two or more holes are prepared in that deck plate, and while the rise of the contact jet pressure produced when exhaust air of an aircraft engine contacts this deck plate directly is controlled, the noise of an exhaust jet is absorbed.

[0026] Moreover, in the aircraft-engine ground test facility by this invention, since the silence layer is given to the floor line between that the noise-proof wall is formed in the tooth-back side of a deck plate and a deck plate, and a noise-proof wall, the jet noise of engine exhaust air is absorbed. Moreover, the wave-motion flow by the contact back pressure of the exhaust jet which acts from the hole of a deck plate to the air space between a deck plate and a noise-proof wall on the back is eased by existence of this silence layer.

[0027] Thus, the jet noise of an aircraft engine can be decreased in the aircraft-engine ground test facility of this invention, without using a splitter mold silencer and the jet pipe for opening this and the exhaust port of an aircraft engine for free passage.

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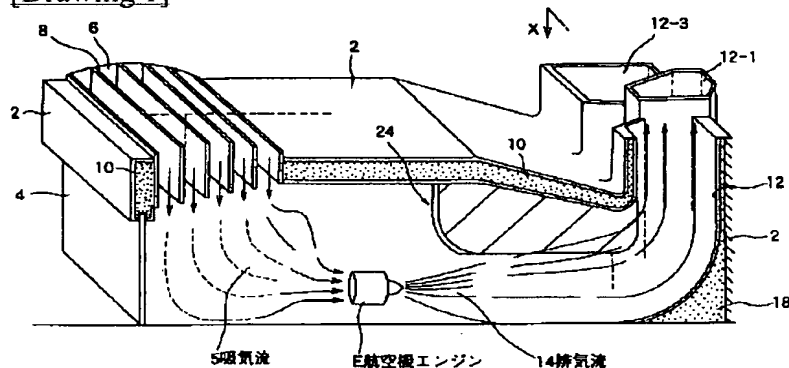
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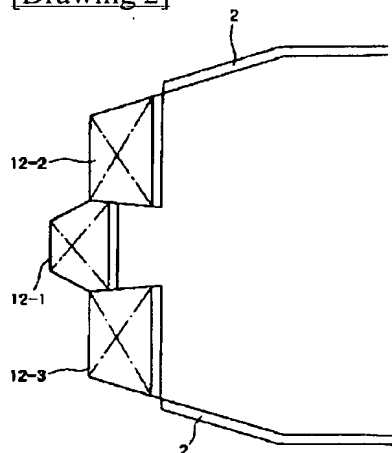
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## DRAWINGS

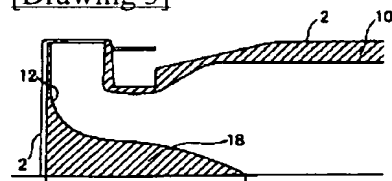
[Drawing 1]



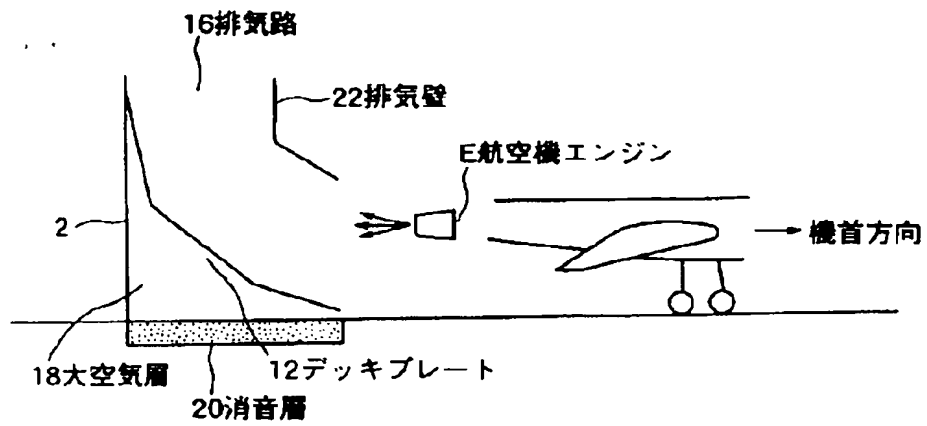
[Drawing 2]



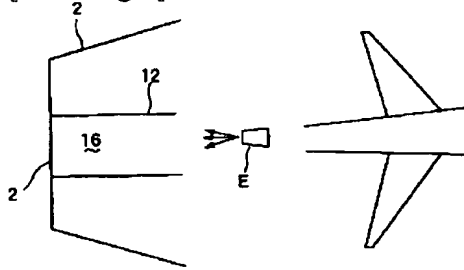
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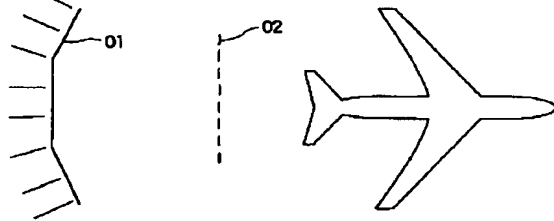
[Drawing 4]



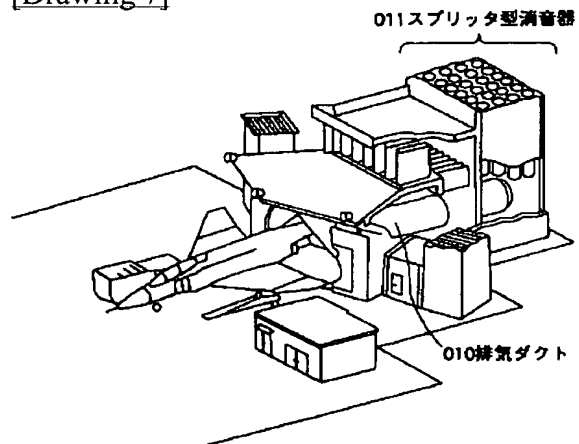
[Drawing 5]



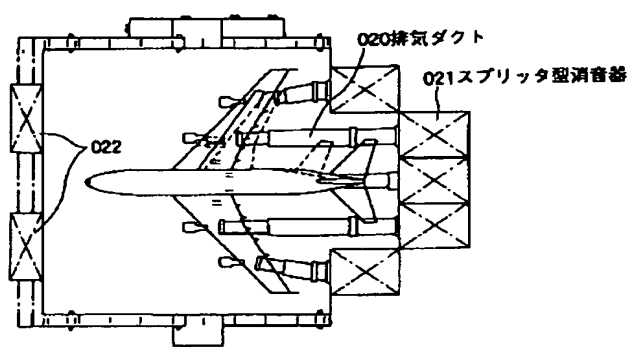
[Drawing 6]



[Drawing 7]



[Drawing 8]



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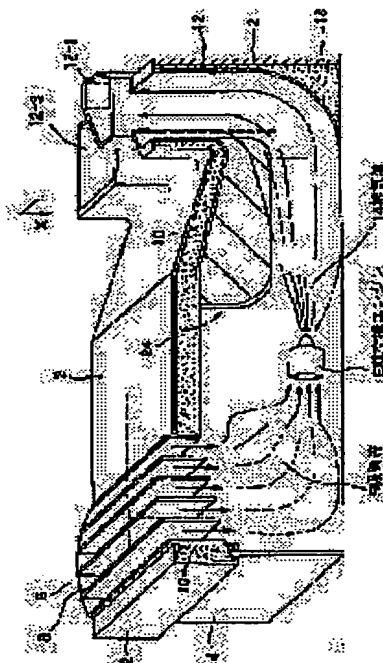
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**SOLUTION:** This facility is a noise-suppressed type facility for an engine ground test while parking an aircraft on the ground. The facility has a deck plate 12 disposed to be positioned with a space on the rear side of an exhaust port of an aircraft engine E set for the ground test, arranged inclinedly from its lower side upto its upper side to form an exhaust passage for guiding exhaust of the engine E to the upper side, and provided with plural holes, a sound insulation wall 2 arranged in a backface side of the deck plate 12 to keep a space with respect to the plate 12, and a sound insulation layer executed with an anisotropic material such as a porous material and a crushed stone in a floor between the deck plate 12 and the sound insulation wall 2.



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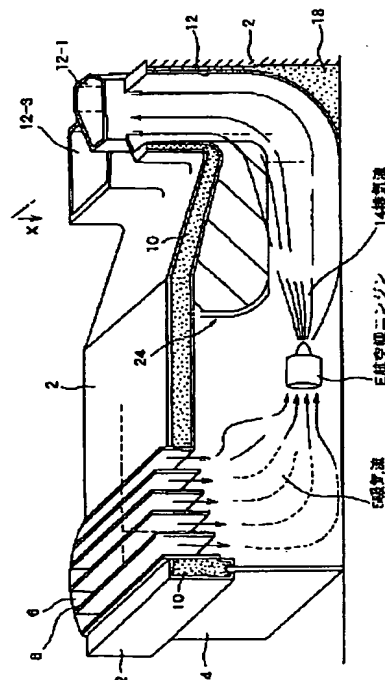
弁理士 石川 新

(54) 【発明の名称】 航空機エンジン地上試験設備

(57) 【要約】

【課題】 航空機を駐機したままエンジン地上試験を行うための消音型設備において、低周波騒音の発生源となる排気ダクトの設置を不必要とし、構造簡単で消音効果の優れたエンジン地上試験の消音型設備を提供すること。

【解決手段】 航空機を駐機したままエンジン地上試験を行うための消音型設備である。地上試験を行う航空機エンジンEの排気口後方に間隔を保って位置するように設置されエンジンEの排気を上方に導く排気路16を形成するよう下方から上方へ傾斜して配置され複数の孔が設けられたデッキプレート12、同デッキプレート12の背面側に同デッキプレート12と間隔を保って配置された遮音壁2、及び前記デッキプレート12と遮音壁2の間にある床面に、多孔材または碎石などの異方形材料で施工した消音層20を有している。



【特許請求の範囲】

【請求項1】 航空機を駐機したままエンジン地上試験を行うための航空機エンジン地上試験設備において、前記地上試験を行う航空機エンジンの排気口の後方に同エンジンの排気口から間隔を保って位置するように設置されエンジンの排気を上方に導く排気路を形成するよう下方から上方へ傾斜して配置され複数の孔が設けられたデッキプレート、同デッキプレートの背面側に同デッキプレートと間隔を保って配置された遮音壁、及び前記デッキプレートと遮音壁の間にある床面に施工した消音層を有することを特徴とする航空機エンジン地上試験設備。

【請求項2】 前記消音層を多孔材または碎石などの異方形材料で構成したことを特徴とする請求項1記載の航空機エンジン地上試験設備。

【発明の詳細な説明】

【0001】

【発明の属する技術分野】 本発明は、航空機を駐機したままエンジン地上試験を行うための消音型の航空機エンジン地上試験設備に関する。

【0002】

【従来の技術】 空港などで点検、整備後の航空機を駐機したままエンジン地上試験を行うため消音型の試験設備が設けられる。このための航空機エンジン地上試験設備として、従来、種々の構造のものが提供されている。その一例として、図6に示すようにエンジン地上試験を行う航空機の背面側に遮音塀を設置しただけの構成のものがある。

【0003】 これは、ブラストフェンス型と呼ばれるもので、エンジン地上試験機の背面側に航空機エンジンから出る騒音を遮る遮音塀01を設けたものである。この型式の航空機エンジン地上試験設備では、航空機エンジンからの排気噴流の高熱や高速流を遮るために、遮音塀01の前方に金網製などのブラストフェンス02を設置しなくてはならない。このブラストフェンス型の設備では、平面状の遮音塀01における回折作用によって減音するので、その減音量は少ない。

【0004】 また、図7に示すスプリッタ型と呼ばれる航空機エンジン地上試験設備がある。これは、エンジン地上試験を行う航空機エンジンからの排気を排気ダクト010によってスプリッタ型消音器011に導いて消音する構造のものである。スプリッタ型消音器011は、吸音パネルでハニカム状に仕切られた流路を有している。

【0005】 このスプリッタ型の航空機エンジン地上試験設備では、スプリッタ型消音器に航空機エンジンの排気を導入するための排気ダクト010が必要であり、この排気ダクト010は、内部に排気が流れるとダクト内に特定周波数の騒音を発生する。このため、排気ダクト010が発生する騒音を消音するためのスプリッタ型消音器を追設する必要がある、このスプリッタ型の設備は

構造複雑な重量物とならざるをえない。

【0006】 また、スプリッタ型消音器を使った他の従来の航空機エンジン地上試験設備として、セミハンガ型と呼ばれるものがある。これは、エンジン地上試験を行う航空機の周りを遮音壁で囲んであるが、スプリッタ型消音器を設置することに伴う問題点を有している点では図7に示した設備と同様の欠点がある。

【0007】 更にまた、スプリッタ型消音器を使った他の航空機エンジン地上試験設備として、図8に示したハッシュドハウス（全密閉）型と呼ばれるものがある。これは、エンジン地上試験を行う航空機を全周で覆う建屋型式としたもので、航空機の前面にはエンジンに吸気を流すための吸気口022が設けてある。図8において、021がスプリッタ型消音器であり、020がエンジン排気をスプリッタ型消音器021に導く排気ダクトである。この設備は遮音性には優れているが、スプリッタ型消音器を設備するものであることから図7の設備について説明したと同様の問題点を有している。

【0008】

【発明が解決しようとする課題】 本発明は、航空機を駐機したままエンジン地上試験を行うための従来の消音型設備が前記した欠点を有していることに鑑み、低周波騒音の発生源となる排気ダクトの設置を必要とするスプリッタ型消音器を使用することなしに、構造簡単で消音効果の優れたエンジン地上試験の消音型設備を提供することを課題としている。

【0009】

【課題を解決するための手段】 本発明は、航空機を駐機したままエンジン地上試験を行うための消音型設備における前記課題を解決するため、地上試験を行う航空機エンジンの排気口の後方に同エンジンの排気口から間隔を保って位置するように設置されエンジンの排気を上方に導く排気路を形成するよう下方から上方へ傾斜して配置され複数の孔が設けられたデッキプレート、同デッキプレートの背面側に同デッキプレートと間隔を保って配置された遮音壁、及び前記デッキプレートと遮音壁の間にある床面に施工した消音層を有する構造の航空機エンジン地上試験設備を提供する。

【0010】 本発明による航空機エンジン地上試験設備における前記消音層は、多孔材または碎石などの異方形材料で構成することができる。

【0011】 以上の構造をもつ本発明の航空機エンジン地上試験設備では、航空機エンジンから出る排気を上方に導くデッキプレートの回折作用により大きな消音効果を得ることができる。また、そのデッキプレートには複数の孔が設けられているので、航空機エンジンの排気がこのデッキプレートに直接接触することによって生ずる接触噴流圧の上昇を抑制するとともに、排気噴流の騒音を吸音する。

【0012】 また、デッキプレートの背面側には遮音壁

が設けられていること、及びデッキプレートと遮音壁の間の床面に消音層を施工してあるためエンジン排気の噴流騒音が吸収される。また、この消音層の存在によって、デッキプレートの孔からデッキプレートと背面の遮音壁の間の空気層へ作用する排気噴流の接触背圧による波動流れが緩和される。

【0013】このように、本発明の航空機エンジン地上試験設備ではスプリック型消音器や、これと航空機エンジンの排気口とを連通するための排気ダクトを用いることなく、航空機エンジンの噴流騒音を減少させることができる。

【0014】

【発明の実施の形態】以下、本発明による航空機エンジン地上試験設備を図示した実施の一形態に基づいて具体的に説明する。図1及び図2において、2は防音壁で、エンジン地上試験を行う航空機の周りを囲むように設けられ、機首側には防音扉4によって開閉可能な開口が形成されている。防音壁2は天井にも設けられ全密閉型に構成されている。

【0015】天井の防音壁2の機首側には、地上試験を行う航空機エンジンEに吸気流5を供給するための吸気開口6が設けられ、その吸気開口6には複数の吸音板8を立設して構成した吸気消音装置が設けられている。なお、防音壁2は、図に見られるように内部に空気層10が形成され消音効果を高める構成となっている。

【0016】地上試験を行うエンジンEの排気口の後方となる防音壁2の前方にはデッキプレート12が設けられている。航空機エンジンEは、胴体の中心に設けられたセンターエンジンと翼に取り付けられたウィングエンジンがあるが、その両エンジンの排気流14に対応できるようにデッキプレート12は図2に見られるように12-1、12-2、及び12-3の3個所に設けられている。

【0017】デッキプレート12は、図4にセンターエンジン用のものについて概念的に示してあるように、噴出される航空機エンジンEの排気を上方に導く排気路（煙道）16を形成するように下方から上方へ防音壁2に沿って次第に立ち上げられて設けられている。デッキプレート12は、エンジン排気噴流の高熱・高速流体との接触に耐える金属でつくられ、エンジン排気口から所定間隔を保つ位置に設けられる。デッキプレート12は、適宜の大きさの孔が複数個設けられた孔明きの構造となっている。

【0018】デッキプレート12とその背後にある防音壁2との間には、大空気層18が形成されており、その大空気層18の床面には、多孔材、または碎石などの異方形材料で構成した消音層20が施工してある。22は排気路16の内側の面を形成するように天井から立ち上げた排気壁であるが、これは不可欠ではなく、設置を省いてもよい。

【0019】デッキプレート12と天井及び排気壁22によって形成される排気路（煙道）16の実際の形状は図3に示す態様となる。なお、防音壁2と排気路16を形成する煙道面は、多孔質材により吸音を行わせるように構成したコンクリート製の吸音式遮音構造としてある。24は、天井に設けられ、排気路16に向けられたエンジン排気がエンジン吸気の方に再循環するのを防ぐ排気再循環防止板である。

【0020】本実施形態の航空機エンジン地上試験設備は以上の構造を有しており、地上試験により航空機エンジンの排気口から排出された排気噴流は、デッキプレート12に当たって上方の排気路16へ導かれ、この騒音の方向を上方に向けるという回折作用により消音効果が得られる。また、デッキプレート12には複数の孔が設けられているため、デッキプレート12にエンジン排気噴流が直接接触しても接触噴流圧の上昇が抑制されるとともに、噴流の反射を抑制し、排気噴流の流れをやわらげ、噴流速度差による低周波音が発生しない。また、この複数の孔が吸音作用を発揮する。

【0021】一方、デッキプレート12の孔を通過してデッキプレート12の背面側の大空気層18に作用するエンジン排気噴流の接触背圧による波動流れは、その大空気層18の床面に設けられた消音層により緩和され、また、デッキプレート12を通過して伝播して来る音波が吸収される。更に、デッキプレート12の背面側にある大空気層18と防音壁2はエンジン排気噴流騒音を効果的に減少させる。

【0022】以上、本発明を図示した実施形態に基づいて具体的に説明したが、本発明がこれらの実施形態に限定されず特許請求の範囲に示す本発明の範囲内で、その具体的な構造、構成に種々の変更を加えてよいことはいうまでもない。

【0023】例えば、上記実施形態では天井をも防音壁2で覆い全密閉型の構成としているが、立地条件によっては天井に防音壁を設けない構造としてもよい。また、上記実施形態のものでは、吸気開口6を天井部に設けた構成を採用しているが、吸気は前方から取り込むようにしたものであってもよく、吸気開口を天井部に設けることに何ら限定されるものではない。

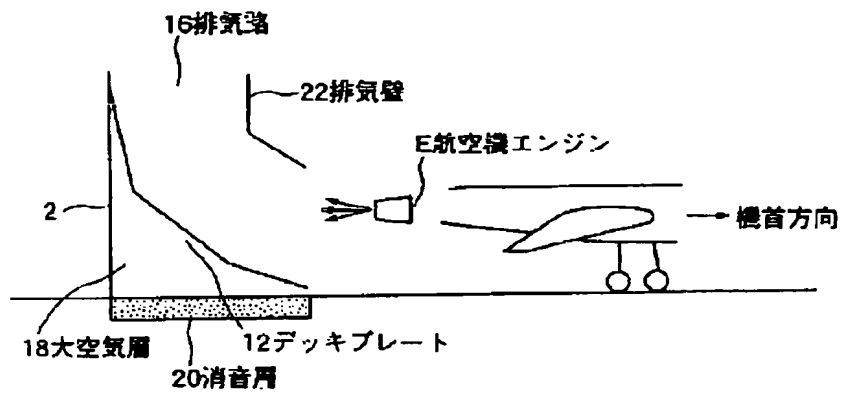
【0024】

【発明の効果】以上説明したように、本発明による航空機エンジン地上試験設備は、地上試験を行うエンジンの排気口の後方にその排気口と間隔を保って位置するように設置されエンジンの排気を上方に導く排気路を形成するよう下方から上方へ傾斜して配置され複数の孔が設けられたデッキプレート、同デッキプレートの背面側に同デッキプレートと間隔を保って配置された遮音壁、及び前記デッキプレートと遮音壁の間にある床面に施工した消音層を有している。

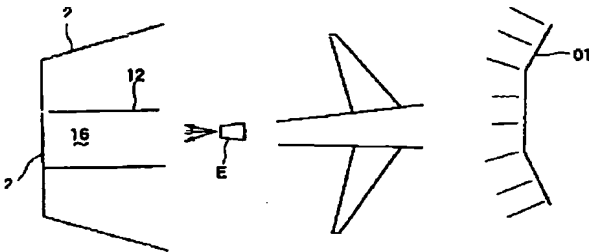
【0025】従って、本発明の航空機エンジン地上試験



【図4】



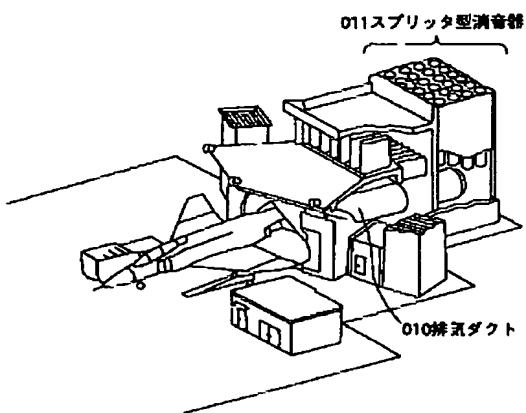
【図5】



【図6】



【図7】



【図8】

